--TITLE OF THE INVENTION--

METHOD AND DEVICE IN CONNECTION WITH A REEL-UP

-- FIELD OF THE INVENTION --

The invention relates to a method according to the preamble of the appended claim 1 in connection with a reel-up. The invention also relates to a device in connection with the reel-up, the device being of the type presented in the preamble of the appended claim 8.

--BACKGROUND OF THE INVENTION--

By means of a continuous reel-up a continuous paper web, typically of several meters wide, passed from a paper machine or finishing machine for paper, is reeled to form machine reels. To implement the reeling in a continuous manner, a reel change has to be conducted at fixed intervals, so that when the preceding machine reel becomes full, the web is guided to travel to a new reel spool forming the core of the next machine reel.

Marked-up version of the paragraph bridging page 2 and page 3 as amended.

--OBJECTS AND SUMMARY OF THE INVENTION--

One purpose of the present invention is to introduce a method in connection with the reel change, by means of which the above-presented drawbacks of the solutions of prior art can be eliminated to a large degree, thus improving the state of the art in the field. To attain this purpose, the method according to the invention is primarily characterized in what will be presented in the characterizing part of the appended claim 1. The device according to the invention, in turn, is characterized in what will be presented in the characterizing part of the appended claim 8.

Marked up version of page 3 as amended.

[The other characteristics of the invention are disclosed in the appended dependent claims and in the description hereinbelow.]

Marked-up version of page 3, third full paragraph, as amended.

--BRIEF DESCRIPTION OF THE DRAWINGS--

In the following description the invention will be described in more detail with reference to the appended --drawings.-- [drawing, in which] --In the drawings--

Fig. 1	shows a side-view of a situation in the reel-up of a paper web before the cutting
	of the web,

- Fig. 2 shows a side-view of a situation in the reel-up of a paper web after the cutting of the web, and
- Fig. 3 illustrates the device on larger scale.

Marked-up version of paragraph bridging page 3 and page 4 as amended.

-- DETAILED DESCRIPTION OF THE INVENTION --

Fig. 1 shows a reel-up for paper web known as such, in which reel-up the method and the device are applied. Said reel-up is a continuous reel-up which reels successive machine reels R around reel spools 2 from a continuous paper web W passed from a paper machine or finishing machine for paper. During the reeling, the reel spools 2 are supported at the ends by means of a suitable supporting structure, such as reeling rails. During the reeling, the machine reels are rotated with a centre-drive of their own. Fig. 1 shows a situation in which, to implement the reel change, the machine reel R that has become full is taken away from the reeling cylinder 1 by means of reeling carriages which are in contact with the ends of the reel spool 2, via which reeling cylinder the paper web W has been passed to the reel through a reeling nip between the reel and the cylinder 1. The narrowing gap between the incoming run of the web and the outer surface of the reel, via which gap air tends to intrude into the reel, is marked with an arrow G. Furthermore, Fig. 1 shows how the new reel spool 2 is brought in contact with the web W travelling on the surface of the reeling cylinder 1 to conduct the change.

• •

4 2 2 4 3

Marked-up version of claims as amended.

- 1. (Amended) A Method in connection with a reel-up of a paper web provided with a rotating reel spool (2) around which a reel (R) has been formed from the paper web (W) passed to the reel-up, wherein in the method the web (W) passed to the reel is cut, and the surface layers of the reel are bound by means of a press device (3) which is in contact with the surface of the rotating reel (R) and comprises a press member (3b) forming a nip with the peripheral surface of the reel and rotating substantially at the same surface speed therewith, [characterized in that] wherein in addition to using the press member (3b), the final end, i.e. tail (H) of the web that travels along with the rotating motion of the reel, is guided against the peripheral surface of the reel (R) by means of a guiding member (3a), which is located within a distance from the press member (3b) in the direction of the perimeter of the reel and whose surface that is located opposite to the reel has a lower speed in the direction of motion of the peripheral surface of the reel (R) than the peripheral surface of the reel (R).
- 2. (Amended) The method according to claim 1, [characterized in that] wherein the guiding member
- (3a) is a static member whose surface that is in contact with the tail (H) and/or the peripheral surface of the reel (R) is stationary.
- 3. (Amended) The method according to claim 1, [characterized in that] wherein the guiding member (3a) is a rotating guiding member.

A 2 " 40 %

- 4. (Amended) The method according to [any of the foregoing claims, **characterized** in that] claim 1, wherein the surface of the guiding member (3a) that is in contact with the tail (H) and/or the peripheral surface of the reel (R) is elastic.
- 5. (Amended) The method according to claim 4, [characterized in that] wherein the guiding member (3a) comprises one or more flexible members in contact with the tail (H) and/or the peripheral surface of the reel (R).
- 6. (Amended) The method according to claim 5, [characterized in that] wherein the guiding member (3a) comprises bristles, which are in contact with the tail (H) and/or the peripheral surface of the reel (R).
- 7. (Amended) The method according to [any of the foregoing claims, **characterized** in that] claim 1, wherein the guiding member (3a) is used for guiding the tail (H) against the peripheral surface of the reel before the press device (3b) in the direction of rotation of the reel, preferably under the angular distance of 30° from the same.
- 8. (Amended) A device in connection with a reel-up of a paper web, comprising a rotating reel spool (2) and around the same a reel (R) formed from the paper web (W) passed to the reel-up, wherein the device can be arranged in contact with the surface of the rotating reel (R) and it comprises a press member (3b) forming a nip with the peripheral surface of the reel and rotating substantially at the same surface speed therewith, [characterized in that] wherein in addition to

4000

the press member (3b), the device comprises a guiding member (3a), separate from the press member (3b), which can be transferred in the operating position in the vicinity of the peripheral surface of the reel or in contact with the same to guide the final free end of the web, i.e. a tail (H) moving along with the rotating motion of the reel, against the peripheral surface of the reel (R), wherein the guiding member (3a) is in the operating position within a distance from the press member (3b) in the direction of the perimeter of the reel and its surface that is located opposite to the reel is arranged to have a lower speed in the direction of motion of the peripheral surface of the reel (R) than the peripheral surface of the reel (R).

- 9. (Amended) The device according to claim 8, [characterized in that] wherein the guiding member (3a) is a static member whose surface that is in contact with the tail (H) and/or the peripheral surface of the reel (R) is stationary.
- 10. (Amended) The device according to claim 8, [characterized in that] wherein the guiding member (3a) is arranged rotatable in its operating position.
- 11. (Amended) The device according to any of the foregoing claims 8 to 10, [characterized in that] wherein the guiding member (3a) has an elastic surface which can be arranged in contact with the tail (H) and/or the peripheral surface of the reel (R).
- 12. (Amended) The device according to claim 11, [characterized in that] wherein the guiding member (3a) comprises one or more flexible members, which can be arranged in contact with the

A 7 3 40 3

tail (H) and/or the peripheral surface of the reel (R).

- 13. (Amended) The device according to claim 12, [characterized in that] wherein the guiding member (3a) comprises bristles, which can be arranged in contact with the tail (H) and/or the peripheral surface of the reel (R).
- 14. (Amended) The device according to [any of the foregoing claims 8 to 13, **characterized** in that] <u>claim 8</u>, <u>wherein</u> in its operating position the guiding member (3a) is in contact with the tail (H) and/or with the peripheral surface of the reel (R) before the press device (3b) in the direction of rotation of the reel, advantageously under the angular distance of 30° from the same.
- 15. (Amended) The device according to [any of the foregoing claims 8 to 14, **characterized** in that] <u>claim 8</u>, <u>wherein</u> the guiding member (3a) and the press member (3b) are fixed to a common frame (3c) which can be transferred to the operating position in connection with the reel (R).
- 16. (Amended) The device according to claim 15, [characterized in that] wherein the position of the guiding member (3a) with respect to the frame (3c) is adjustable.

~ 5 · 10 · 10

REMARKS

The International Application was amended in response to the International Preliminary Examination Report. It is requested that these amendments be entered for purposes of the present application. Thus the amendments to claims made above are to the claims as amended in response to the International Preliminary Examination Report.

Claims 1-23 are presented for consideration.

Claims 1-16 have been amended.

New Claims 17-23 have been added to further highlight features of the invention previously disclosed. The subject matter of the new claims is fully supported by the specification as originally filed.

The specification has also been amended to include section headings at appropriate locations and to correct minor typographical errors.

Respectfully submitted,

STEINBERG & RASKIN, P.C.

PY// PR DV.

- PAUL J. M66125

NEC 20. 44/152

Martin G. Raskin

Reg. No. 25,642

Steinberg & Raskin, P.C. 1140 Avenue of the Americas New York, New York 10036 (212) 768-3800